



CHEMICAL EMERGENCY PREVENTION & PLANNING *Newsletter*



March - April 2009

US EPA Region 10

Inside This Issue

RMP eSubmit and 5-year Update

New CAMEO

Overheated Flammable Mixture Caused Explosion in Danvers

RMP Fines – Jack Frost

SPCC Rule Amendments

CHEMICAL EMERGENCY PREVENTION & PLANNING *Newsletter*

US EPA Region 10,
ERU ECL-116
1200 6th Avenue, Suite 900
Seattle, Washington 98101

206.553.1255
Fax: 206.553.0124

<http://www.epa.gov/r10earth/112r.htm>

Newsletter Contacts:
For **RMP**: Javier Morales at
morales.javier@epa.gov

For **SPCC/FRP**: AK: Matt Carr at
carr.matthew@epa.gov

WA OR ID: Michael Sibley at
sibley.michael@epa.gov

For **EPCRA**: Suzanne Powers at
powers.suzanne@epa.gov

For free **Subscription**:
allen.stephanie@epa.gov

Idaho Emergency Response Commission Contact Information

Correction: In the Jan/Feb issue we listed State Emergency Response Commissions for reporting releases. To report chemical emergencies in Idaho call (208) 846-7610, the 24/7 State Communications Center. After they receive your report, they will notify the correct parties in Idaho.

Risk Management Plans; Five Year Updates and New Reporting Tools for 2009

Five-Year Updates

All facilities with a current Risk Management Plan (RMP) must completely update all nine sections of their RMP at least once every 5 years from the initial submission or most recent update (even if no changes occur). [40 CFR §68.190(b)(1) of the Clean Air Act].

In June 2009, EPA estimates that approximately 8,000 RMP facilities are due for the five-year update of their Risk Management Plans. The majority (244) of EPA Region 10's four hundred seventy-one (471) facilities will have to update their RMPs in June of 2009.

Your five-year anniversary date is listed in the notification letter which was sent to you after you submitted your last RMP. You can also find your anniversary date in the Registration Section of the hard copy of your RMP and online in the Registration Section of RMP*WebRC (a web based tool for minor corrections/updates).

RMP*eSubmit: New web-based tool designed for complete RMP submissions

Beginning in March 2009 you will be able to submit RMPs online via EPA's secure website which manages thousands of data submissions from states and industry. You will use RMP*eSubmit, an online reporting tool which simplifies the

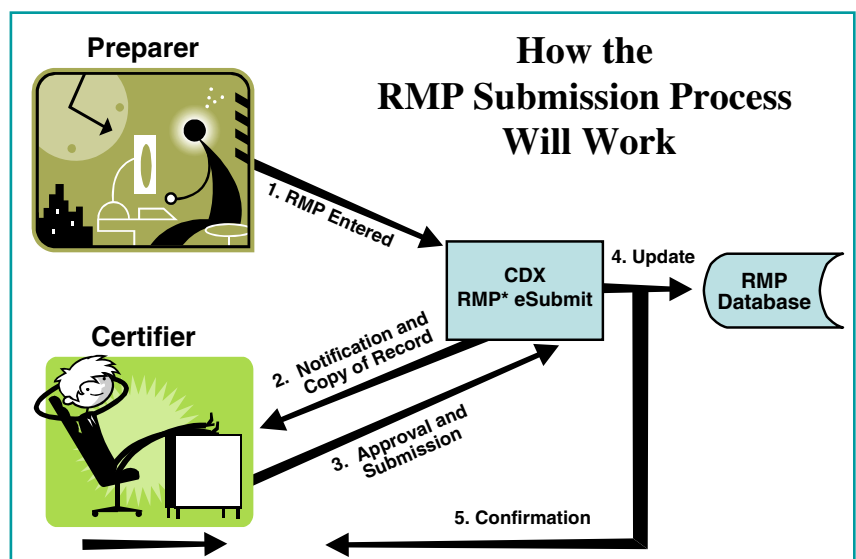
submission process. EPA uses industry-standard technology, including encryption used by most commercial banks, as well as stringent user ID and password protocols to protect your information.

You will be able to access your entire RMP online at anytime. In addition to updating your facility's RMP at least every five years or when other specified update circumstances occur, RMP*eSubmit allows you to update other recurring activities to ensure that your risk management program is current. These activities include, among other things, providing employee refresher training, performing compliance audits, and updating your safety information, hazard review (or process hazards analysis), operating procedures, and offsite consequence analysis.

If you have submitted an RMP previously, you will receive a letter from EPA with directions regarding how to resubmit your RMP using RMP*eSubmit. You do not need to contact the EPA RMP Reporting Center.

Note: If you are submitting an RMP for the first time, you will find instructions on www.epa.gov/emergencies/content/rmp/.

Continued on Page 2



New CAMEO®

RMP Facilities: Use CAMEO to calculate the worst case and alternate case scenarios

Emergency Responders: CAMEO provides information critical for developing emergency plans

A new CAMEO® and updated CAMEO Chemicals website are available online now! CAMEO® (version 2.0) supports importing of Tier2 Submit 2008 files, including facility site plans in graphic formats or as PDF or Microsoft Word documents. (**Please note: Washington State does not accept Tier2submit, and Oregon has their own Fire Marshal's survey**) CAMEO's chemical library has been replaced with the CAMEO Chemicals program, which works interactively with CAMEO® 2.0, ALOHA, and MARPLOT.

CAMEO® is a system of software applications used widely to plan for and respond to chemical emergencies. It is one of the tools developed by EPA's Office of Emergency Management (OEM) and the National Oceanic and Atmospheric Administration Office of Response and Restoration (NOAA), to assist front-line chemical emergency planners and responders. They can use CAMEO to access, store, and evaluate information critical for developing emergency plans. In addition, CAMEO supports regulatory compliance by helping users meet the chemical inventory reporting requirements of the Emergency Planning and Community Right-to-Know Act (EPCRA, also known as SARA Title III).

CAMEO also can be used with a separate software application called LandView® to display EPA environmental databases and demographic/economic information to calculate the worst case and alternate case scenarios as required for CAA 112r Risk Management Facilities. The CAMEO system integrates a chemical database and a method to manage the data, an air dispersion model, and a mapping capability. All modules work interactively to share and display critical information in a timely fashion. The CAMEO system is available in Macintosh and Windows formats. A new version of MARPLOT is also available. MARPLOT 4.0 incorporates web-mapping services and supports the use of shapefiles and a variety of raster formats. You'll be able to click on a location of interest to get its elevation and an instant weather forecast, and you can work with Landview-like

population functions. As you work with the new version, the latest U.S. Census county maps, and state and national map layers will automatically download.

- Download CAMEO® 2.0 from <http://www.epa.gov/oem/content/cameo/request.htm>

- Download the new CAMEO Chemicals program from <http://response.restoration.noaa.gov/cameochemicals>
- Visit the CAMEO Chemicals website at <http://cameochemicals.noaa.gov>

Risk Management Plans; Five Year Updates and New Reporting Tools for 2009

Continued from Page 1

Why has EPA developed RMP*eSubmit?

RMP*Submit (EPA's software application for RMP submittals since 1999) had many disadvantages:

- Limited validation,
- Facilities often lost their last submission,
- Heavy processing load with manual steps,
- Cumbersome mail back notification and resubmission cycle,
- New Certification Letter required for each submission, and
- Security issues: mailing of sensitive data.

The web-based RMP*eSubmit tool offers many advantages, including, but not limited to:

- Online (24/7) access to your RMP,
- Ability to review, submit, correct, update and validate all sections of your RMP at a secure website (<http://www.epa.gov/cdx/> , CDX),
- A one-time only, mailed in, Electronic Signature Agreement with all subsequent transactions online via the CDX website, and
- The ability of a facility's certifier to designate a "Preparer" who will be able to prepare, correct and/or update one or more RMPs and transmit them to the facility for review and approval. **Note that only the facility's certifying official can submit the RMP(s) to EPA.**
- The "Preparer" can be an employee of the facility or an outside service provider.

Transition to RMP*eSubmit

RMP*Submit will be removed from EPA's website and no assistance in obtaining and using RMP*Submit will be provided following the availability of the new system (Target: March 2009). Facilities can use the 2004 version of RMP*Submit if they have it and EPA will accept those submissions if they are without error. However, corrections will have to be made via RMP*eSubmit (Exception: CBI). EPA will no longer accept submissions from RMP*Submit 2004 on January 2010.

Where Do I Go For More Information?

<http://www.epa.gov/emergencies/rmp> will be updated as new information becomes available.

EPA maintains numerous listservs to keep the public, state and local officials, and industry up to date, including several that pertain to emergency management. You can sign up for our list serve to receive periodic updates: https://lists.epa.gov/read/all_forums/subscribe?name=callcenter_oswer

EPA Region 10 RMP Coordinator:
Javier Morales 206-553-1255

EPA Region 10 RMP Website:
<http://yosemite.epa.gov/R10/CLEANUP.NSF/sites/rmp>

Overheated Flammable Mixture Caused Explosion in Danvers

CSB Issued Inspection Report on Solvent Vapor Explosion in Massachusetts

A massive explosion and fire at the CAI ink manufacturing facility shook Danvers, Massachusetts on November 22, 2006. Investigation by the Chemical Safety Board concluded the lack of checklists, automatic shutoff systems, process controls, and hazard analyses lead to a catastrophic chemical accident.

On the night of the accident, ink base materials - including a volatile mixture of heptane and propyl alcohol - continued to heat and then boil after all the employees left work late in the afternoon. The heating was controlled by a single, manual valve that needed to be closed by an operator to prevent the 3,000-gallon tank from overheating.



West end of the Danversport peninsula before the explosion. CAI/Arnel facility circled.

Photo: Office of Geographic and Environmental Information (MassGIS), Commonwealth of Massachusetts, Executive Office of Energy and Environmental Affairs.

Steam heat to the mixing tank was most likely inadvertently left on by an operator before he left for the day. As the temperature increased, vapor escaped from the mixing tank, built up in the unventilated building, ignited, and exploded.

The building ventilation system was turned off at the end of the workday - a routine procedure - and vapor coming out of the unsealed tank spread throughout the production area and then ignited from an undetermined source, possibly a spark from an electrical device.

The CSB investigator said, 'The immediate cause of the accident was the overheating of a highly flammable mixture for many hours. We found an underlying cause was CAI's failure to conduct a hazard analysis or other systematic review to ensure flammable liquids were safely handled during the manufacturing process.'



CAI, Inc. and Arnel Company, Inc. — Danvers, Massachusetts, November 22, 2006

'The company did not have automated process controls, alarms, or other safeguards in place. The standard practice at the company was to shut off ventilation at night - to retain heat in the building and to allay residential complaints about fan noise,' 'When the mixture continued to overheat - absent automatic shutoffs and proper ventilation - the vapor accumulated and filled much of the building over a period of hours. Without safeguards, it is likely that a small but foreseeable human error led to disaster.'

Based on the quantities of flammable materials used, CAI was required to comply with OSHA's Process Safety Management standard, which would have required the company to conduct a process hazard analysis. Such a review could have identified the need for more sophisticated process control equipment, operator checklists, and continuous building ventilation. The standard also requires the use of written operating procedures, which can reduce the occurrence of human errors.

CBS produced a video featuring a computer-generated 3-D animation graphically depicting the sequence of events leading to the explosion and the subsequent blast wave that rolled over the residential area, destroying dozens of homes and businesses and causing extensive damage to many more. The animation shows how the blast blew entire window frames into



Explosion and fire destroyed the CAI/Arnel building.

the bedrooms of sleeping residents, who comment on the experience in the video. Remarkably, only a handful of residents were injured, none seriously.

This report is from the U.S. Chemical Safety Board. The CSB is an independent federal agency charged with investigating industrial chemical accidents.

Training Resource: **"Blast Wave in Danvers"**

CSB investigations can be excellent training tools; the videos are available for viewing and downloading at the Video Room of the CSB's website, www.safetyvideos.gov. DVDs can be requested free of charge.

Jack Frost Fruit Company Agrees to spend over \$100,000 to settle EPA Risk Management Program Violations

Company agrees to spend over \$85,000 for safety improvements at its Yakima facility & purchase new communications & rescue equipment for local fire departments.

(Seattle, Wash. – February 3, 2009)

The Jack Frost Fruit Company, of Yakima, Washington, has agreed to pay \$20,554 for alleged violation of the U.S. Environmental Protection Agency's Risk Management Program requirements. EPA found the company lacked a prevention program to protect the public and the environment from an off-site release of anhydrous ammonia.

According to Edward Kowalski, Director of EPA's Office of Compliance & Enforcement in Seattle, the Risk Management Program is designed to protect public health and the environment from accidental releases of harmful chemicals.

"We can't take chances with public health," said EPA's Kowalski. "Preventing an accidental release of dangerous chemicals protects the lives of workers, responders and nearby residents."

As part of the settlement, Jack Frost has corrected all alleged violations, and agreed to spend at least \$85,000 to implement two Supplemental Environmental Projects within the next twelve months. The Projects involve taking steps at its facility to reduce the risk of release of anhydrous ammonia from its pipes and providing communications and rescue equipment to local area fire departments to improve the departments' capabilities in responding to hazardous material emergencies in a safe and effective environment.

The Company uses more than 10,000 lbs of anhydrous ammonia for refrigeration at its cold storage warehouse in Yakima, Washington. Under the law, any facility that uses, stores, manufactures, or handles more than 10,000 pounds of anhydrous ammonia is required to prepare and submit a Risk Management Plan to EPA.

Anhydrous ammonia is one of the most potentially dangerous chemicals used in refrigeration and agriculture today. Few problems occur when the ammonia is being handled properly; but most accidents with anhydrous ammonia are due to uncontrolled or accidental releases.

Specific items required by the Risk Management Program include: development of an emergency response or action plan; hazard evaluation of a "worst case and more probable case" chemical release; operator training; review of the hazards associated with using toxic or flammable substances; and operating procedures and equipment maintenance.

Finalized Amendments to the SPCC Rule - December 2008

On December 5, 2008, the Federal Register published EPA's final rule to amend the SPCC rule in order to provide increased clarity, to tailor requirements to particular industry sectors, and to streamline certain requirements for those facility owners or operators subject to the rule, which should result in greater protection to human health and the environment. Link to Regulation: [**Oil Pollution Prevention; Spill Prevention, Control, and Countermeasure Rule Requirements - Amendments.**](#)

Final Rule - Delay of Effective Date and Request for Comment

On January 29, 2009, in accordance with the January 20, 2009, White House memorandum entitled **"Regulatory Review"** and the Office of Management and Budget memorandum entitled, **"Implementation of Memorandum Concerning Regulatory Review,"** EPA is delaying by 60 days the effective date of the final rule that amends the Spill Prevention, Control, and Countermeasure (SPCC) regulations promulgated in the Federal Register on December 5, 2008. The amendments will now become effective on April 4, 2009.

Additionally, EPA is requesting public comment on the delay of the effective

date and on the requirements for produced water containers at oil production facilities and the criteria for identification of qualified oil production facilities eligible to self-certify their SPCC Plans. Comments must be received on or before March 5, 2009. Finally, the Agency is also reviewing the dates by which owners or operators of facilities must prepare or amend their SPCC Plans, and implement those Plans.

Neither this delay, nor the December 5, 2008, final rule remove any regulatory requirement for owners or operators of facilities in operation before August 16, 2002, to maintain an SPCC Plan in accordance with the SPCC regulations.

This newsletter provides information on the EPA Risk Management Program, EPCRA, SPCC/FRP and other issues relating to Accidental Release Prevention Requirements. The information should be used as a reference tool, not as a definitive source of compliance information. Compliance regulations are published in 40 CFR Part 68 for CAA section 112(r) Risk Management Program, and 40 CFR Part 355/370 for EPCRA.